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# NOTICE OF ALLOWANCE AND FEE(S) DUE

27045 7590 ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11

PLANO, TX 75024

02/19/2010

EXAMINER JAMA, ISAAK R

PAPER NUMBER

ART UNIT

DATE MAILED: 02/19/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/596,861	06/27/2006	Peter Larsson	P18811-US1	1464	

TITLE OF INVENTION: METHOD AND SYSTEM FOR WIRELESS COMMUNICATION NETWORKS USING COOPERATIVE RELAYING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	05/19/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE: shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	or transi ig the Pa ierwise i	mitting the 1880 atent, advance or in Block 1, by (a	ders and notification ) specifying a new o	of m	naintenance fees w pondence address;	rill be and/or	mailed to the current (b) indicating a sepa	corresp rate "F	ondence address as EE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)					Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
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10/596,861 TITLE OF INVENTION	06/27/2006 I: METHOD AND SYST	EM FOI	R WIRELESS CO	Peter Larsson OMMUNICATION N	ETW	ORKS USING CO		P18811-US1 ATIVE RELAYING		1464
APPLN. TYPE	SMALL ENTITY	ISS	UE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSUE		TOTAL FEE(S) DUE		DATE DUE
nonprovisional	NO		\$1510	\$300	\$0			\$1810		05/19/2010
EXAM	IINER	Α	ART UNIT	CLASS-SUBCLASS	3					
JAMA, I	SAAK R		2617	370-315000						
CFR 1.363).  Change of corresp Address form PTO/SI  Fee Address" ind PTO/SB/47; Rev 03-C Number is required.  ASSIGNEE NAME A	ND RESIDENCE DATA less an assignee is ident h in 37 CFR 3.11. Comp	nge of C 'Indicated. Use	correspondence ion form of a Customer		ip to mativ single or a attor II be p or typ he pa g an a	3 registered paten ely, e firm (having as a gent) and the name neys or agents. If o printed.	membes of uno name	er a 2		t has been filed for
Please check the appropr	iate assignee category or	categori	es (will not be pr	inted on the patent):	۵	Individual 🚨 Co	rporati	on or other private gro	oup entit	y Government
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- 11	s SMALL ENTITY state	s. See 3	7 CFR I.27.					TTY status. Sec 37 Cl		
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27045	7590	02/19/2010		EXAMINER		
ERICSSON	INC.			JAMA, I	SAAK R	
6300 LEGA				ART UNIT	PAPER NUMBER	
M/S EVR 1- PLANO, TX				2617 DATE MAII ED: 02/19/201	0	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 528 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 528 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)
10/596,861	LARSSON, PETER
Examiner	Art Unit
ISAAK P. IAMA	2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence addressAll claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to 11/04/2009.
- 2. The allowed claim(s) is/are 29-50 and 54-56 which are now renumbered 1-25...
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some\* c) None of the:
    - 1. T Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No.
    - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date \_\_\_\_\_
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. 
  Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date \_\_\_\_\_\_

  4. Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. 

  Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. 

  Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🗌 Other \_\_\_

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#### DETAILED ACTION

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Roger S. Burleigh (Reg. # 40,542) on 02/02/2010.

In the claims:

1. Claims 52 and 53 have been cancelled.

[End Amendment]

# Allowable Subject Matter

- Claims 29-50, and 54-56 are allowed.
- 3. The prior art made of record and relied upon by the examiner fails to teach or even suggest "a system, method and base station for performing communication in a two-hop wireless communication network, wherein a base station, at least one mobile station and a plurality of relay stations are engaged in, or in the process of establishing, a communication session, and wherein the relay stations forward signals from the base station to the at least one mobile station, said plurality of relay stations having at least

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partially overlapping coverage, said method comprising the steps of: establishing by said at least one mobile station a soft association to said plurality of relay stations by internally selecting a set of relay channels from said number of relay stations, said set of relay channels associated to the relay stations being candidates for use in the communication session; feeding back from the at least one mobile station, during the communication session, information on the communication quality to the base station; and, adapting in the base station the transmission to at least one of the relay stations which the mobile station has soft association with, in response to the communication quality feedback from the at least one mobile station" recited in independent claims 29, 47 and 54.

 Claims 30-46, 48-50 and 55-56 depend on independent claim 29, 47 and 54 respectively, and are therefore allowed.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ISAAK R. JAMA whose telephone number is (571)270-5887. The examiner can normally be reached on Monday-Thursday; 4-10.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/IRJ/

/LESTER KINCAID/

Supervisory Patent Examiner, Art Unit 2617